

INTERNATIONAL SEARCH REPORT

International application No.

PCT / JP2004 / 010737

<p>A. CLASSIFICATION OF SUBJECT MATTER Int.Cl⁷ F16D3/20, F16D3/205</p> <p>According to International Patent Classification (IPC) or to both national classification and IPC</p>														
<p>B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) Int.Cl⁷ F16D3/20, F16D3/205</p> <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Jitsuyo Shinan Koho 1922-1996 Jitsuyo Shinan Toroku Koho 1996-2004 Kokai Jitsuyo Shinan Koho 1971-2004 Toroku Jitsuyo Shinan Koho 1994-2004</p> <p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)</p>														
<p>C. DOCUMENTS CONSIDERED TO BE RELEVANT</p> <table border="1"> <thead> <tr> <th>Category*</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>Y A</td> <td>JP 10-184717 A (NTN Corp.), 14 July, 1998 (14.07.98), Full text; Figs. 1 to 9 & US 5989124 A & EP 0836023 A1 & WO 1997/029294 A1</td> <td>1-18 19-21</td> </tr> <tr> <td>Y A</td> <td>JP 2001-208090 A (NTN Corp.), 03 August, 2001 (03.08.01), Par. No. [0042]; Fig. 6 & US 2003/0130045 A1 & FR 2800817 A1</td> <td>1-18 19-21</td> </tr> <tr> <td>A</td> <td>JP 5-296255 A (Honda Motor Co., Ltd.), 09 November, 1993 (09.11.93), Par. Nos. [0017] to [0021]; Fig. 4 (Family: none)</td> <td>8, 18, 21</td> </tr> </tbody> </table>			Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	Y A	JP 10-184717 A (NTN Corp.), 14 July, 1998 (14.07.98), Full text; Figs. 1 to 9 & US 5989124 A & EP 0836023 A1 & WO 1997/029294 A1	1-18 19-21	Y A	JP 2001-208090 A (NTN Corp.), 03 August, 2001 (03.08.01), Par. No. [0042]; Fig. 6 & US 2003/0130045 A1 & FR 2800817 A1	1-18 19-21	A	JP 5-296255 A (Honda Motor Co., Ltd.), 09 November, 1993 (09.11.93), Par. Nos. [0017] to [0021]; Fig. 4 (Family: none)	8, 18, 21
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<p><input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.</p>														
<p>* Special categories of cited documents:</p> <table border="0"> <tr> <td style="vertical-align: top;"> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </td> <td style="vertical-align: top;"> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&" document member of the same patent family</p> </td> </tr> </table>			<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&" document member of the same patent family</p>										
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<p>Date of the actual completion of the international search 29 October, 2004 (29.10.04)</p>		<p>Date of mailing of the international search report 16 November, 2004 (16.11.04)</p>												
<p>Name and mailing address of the ISA/ Japanese Patent Office</p>		<p>Authorized officer</p>												
<p>Facsimile No.</p>		<p>Telephone No.</p>												

A. 発明の属する分野の分類 (国際特許分類 (IPC))		
Int. Cl ¹ F16D3/20 F16D3/205		
B. 調査を行った分野		
調査を行った最小限資料 (国際特許分類 (IPC))		
Int. Cl ¹ F16D3/20 F16D3/205		
最小限資料以外の資料で調査を行った分野に含まれるもの。 日本国実用新案公報 1922-1996年 日本国公開実用新案公報 1971-2004年 日本国実用新案登録公報 1996-2004年 日本国登録実用新案公報 1994-2004年		
国際調査で使用した電子データベース (データベースの名称、調査に使用した用語)		
C. 関連すると認められる文献		
引用文献の カテゴリー*	引用文献名 及び一部の箇所が関連するときは、その関連する箇所の表示	関連する 請求の範囲の番号
Y	JP 10-184717 A (エヌティエヌ株式会社)	1-18
A	1998. 07. 14, 全文, 第1-9図 & US 59891 24 A & EP 0836023 A1 & WO 1997 /029294 A1	19-21
Y	JP 2001-208090 A (エヌティエヌ株式会社)	1-18
A	2001. 08. 03, 段落【0042】, 第6図 & US 2 003/0130045 A1 & FR 2800817 A1	19-21
<input checked="" type="checkbox"/> C欄の続きにも文献が列挙されている。 <input type="checkbox"/> パテントファミリーに関する別紙を参照。		
* 引用文献のカテゴリー 「A」特に関連のある文献ではなく、一般的技術水準を示すもの 「E」国際出願日前の出願または特許であるが、国際出願日以後に公表されたもの 「L」優先権主張に疑義を提起する文献又は他の文献の発行日若しくは他の特別な理由を確立するために引用する文献 (理由を付す) 「O」口頭による開示、使用、展示等に言及する文献 「P」国際出願日前で、かつ優先権の主張の基礎となる出願日の後に公表された文献 「T」国際出願日又は優先日後に公表された文献であって出願と矛盾するものではなく、発明の原理又は理論の理解のために引用するもの 「X」特に関連のある文献であって、当該文献のみで発明の新規性又は進歩性がないと考えられるもの 「Y」特に関連のある文献であって、当該文献と他の1以上の文献との、当業者にとって自明である組合せによって進歩性がないと考えられるもの 「&」同一パテントファミリー文献		
国際調査を完了した日	29. 10. 2004	国際調査報告の発送日
国際調査機関の名称及びあて先 日本国特許庁 (ISA/JP) 郵便番号100-8915 東京都千代田区霞が関三丁目4番3号		特許庁審査官 (権限のある職員) 平瀬 知明 3 J 9 2 3 7 電話番号 03-3581-1101 内線 3328

C (続き) . 関連すると認められる文献		
引用文献の カテゴリー*	引用文献名 及び一部の箇所が関連するときは、その関連する箇所の表示	関連する 請求の範囲の番号
A	JP 5-296255 A (本田技研工業株式会社) 1993. 11. 09, 段落【0017】-【0021】, 第4図 (ファミリーなし)	8, 18, 21